

REMARKS

Favorable reconsideration of this application as presently amended and in light of the following discussion is respectfully requested.

Claims 1-8 and 19-26 are presently active in this case, Claims 1 and 19 having been amended by way of the present Amendment.

Claims 3-8 and 21-26 have been withdrawn from consideration. The Applicant notes that Claim 1 and Claim 19 are linking claims.

In the outstanding Official Action, Claims 1 and 2 were rejected under 35 U.S.C. 102(b) as being anticipated by Matsumoto et al. (U.S. Patent No. 5,040,069). For the reasons discussed below, the Applicant respectfully traverses the requests the withdrawal of the anticipation rejection.

In the Office Action, the Matsumoto et al. reference is indicated as anticipating each of Claims 1 and 2. However, the Applicant notes that a claim is anticipated only if each and every element as set forth in the claims is found, either expressly or inherently described, in a single prior art reference. *Verdegaal Bros. v. Union Oil Co. of California*, 2 USPQ2d 1051, 1053 (Fed. Cir. 1987). As will be demonstrated below, the Matsumoto et al. reference clearly does not meet each and every limitation of the independent Claim 1.

Claim 1 of the present application recites an imaging device including integrally an imaging element to be mounted on a substrate and an optical element having an imaging lens section for providing a light-receiving surface of the imaging element with optical information. The substrate has an opening section. The imaging element is fastened on the substrate so as to close the opening section with a surface including the light-receiving

surface. And, the optical element is in direct contact with the upper surface of the imaging element by way of the opening section. The Matsumoto et al. reference does not disclose an optical element that is in direct contact with an upper surface of an imaging element, as recited in Claim 1 of the present application.

The Official Action notes a statement in the Fantone reference (U.S. Patent No. 4,870,496), which states that “incoming light travels an optical path through lens 150 and contacts charge coupled device (CCD) array 160.” The Applicant respectfully submits that this statement merely indicates that the light itself is comes into contact with the CCD array (160). In fact, each particle of light is in contact with the lens (150) as it travels through the lens (150), and then each particle of light comes into contact with the CCD array (160) when the particle of light reaches the CCD array (160). However, this does not mean that the lens (150) is in contact with the CCD array (160). Under such an analysis, a drop of water that drops from a faucet in Virginia, then eventually drains into a river, which eventually deposits the drop of water into the Atlantic Ocean, therefore means that the faucet is in contact with the Atlantic Ocean. Such an analysis is clearly erroneous, and a misinterpretation of the phrase “in contact with.” While the drop of water is in contact with the faucet as it leaves the faucet, and while the drop of water is in contact with the Atlantic Ocean when it is deposited therein, this does not mean that the faucet is in contact with the Atlantic Ocean. Similarly, the light traveling through the lens (150) in the Fantone reference and then the light coming into contact with the CCD array (160) does not mean that the lens (150) is in contact with the CCD array (160).

As discussed in the previous Amendment, the thin film substrate (103) of the Matsumoto et al. reference is cited for the teaching of the substrate of Claim 1 of the present application, and the solid image pickup device (104) for the teaching of the imaging element of Claim 1. The Matsumoto et al. reference describes, with reference to Figure 7, a solid image pickup assembly (101) including a transparent support plate (102), a flexible thin film substrate (103), and a solid image pickup device (104) mounted on the thin film substrate (103). The thin film substrate (103) blocks light except in the area of a rectangular opening (105). The solid image pickup device (104) is mounted on a rear side of the thin film substrate (103), and the transparent support plate (102) is provided at a front side of the substrate (103) in between the substrate (103) and an optical unit (labeled as 12 and 13 in Figure 2).

The solid image pickup device (104) is clearly spaced apart from the transparent support plate (102) by the substrate (103), and thus the solid image pickup device (104) is clearly spaced apart from the optical unit by both the support plate (102) and the substrate (103). While a cross-sectional view is not depicted for the embodiment of Figure 7, the cross-sectional view in Figure 1 of the first embodiment clearly shows not only the spacing between the solid image pickup device (19) and the optical unit caused by resin (23), but also an air pocket provided between resin (23) and the optical unit. The embodiment of Figure 7 would include a larger air pocket in the area within opening (105). Accordingly, the Applicant respectfully submits that no portion of the optical unit of the Matsumoto et al. reference is in direct contact with a surface of the solid image pickup device (104).

Accordingly, the Applicant respectfully submits that the Matsumoto et al. reference does not disclose an optical element that is in direct contact with an upper surface of an imaging element, as recited in Claim 1 of the present application. Thus, the Applicant respectfully requests the withdrawal of the anticipation rejection of Claim 1.

Claims 2-8 are considered allowable for the reasons advanced for Claim 1 from which they depend. These claims are further considered allowable as they recite other features of the invention that are neither disclosed nor suggested by the applied references when those features are considered within the context of Claim 1.

Claims 19 and 20 were rejected under 35 U.S.C. 103(a) as being unpatentable over Matsumoto in view of Ueda (U.S. Patent No. 6,122,009). For the reasons discussed below, the Applicant requests the withdrawal of the obviousness rejection.

The basic requirements for establishing a *prima facie* case of obviousness as set forth in MPEP 2143 include (1) there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings, (2) there must be a reasonable expectation of success, and (3) the reference (or references when combined) must teach or suggest all of the claim limitations. Furthermore, the proposed modification cannot change the principle of operation of a reference.

The Applicant submits that a *prima facie* case of obviousness has not been established in the present case because there is no motivation to combine the cited references, as such a combination would change the principle of operation of a reference.

Claim 19 of the present application recites an imaging device comprising a substrate

having an opening section, an imaging element mounted on the substrate, the imaging element having a light receiving surface, and an optical element having an imaging lens section. The imaging element is fastened on the substrate so as to close the opening section with a surface including the light-receiving surface, and the optical element is mounted directly on an upper surface of the imaging element by way of the opening section.

The Official Action notes that the Matsumoto reference fails to disclose an optical element being mounted on an upper surface of the imaging element by way of an opening section. The Official Action cites that Ueda reference for such a teaching. However, as noted above, the solid image pickup device (104) in the Matsumoto reference is clearly spaced apart from the optical unit by both the support plate (102) and the substrate (103). The thin film substrate (103) blocks light except in the area of a rectangular opening (105). By modifying the teachings of the Matsumoto reference to include the mounting configuration of the lens portion (10) and the CCD bare chip (12) of the Ueda reference, this would require the removal of the thin film substrate (103) of the Matsumoto reference, which would be contrary to the teachings of the Matsumoto reference and would change the principle of operation thereof. (See column 5, line 37, through column 6, line 5, of the Matsumoto reference.)

The Applicant, therefore, respectfully submits that the rejection is based on the improper application of hindsight considerations. It is well settled that it is impermissible simply to engage in hindsight reconstruction of the claimed invention, using Applicant's structure as a template and selecting elements from the references to fill in the gaps. *In re Gorman*, 933 F.2d 982, 18 USPQ2d 1885 (Fed. Cir. 1991). Recognizing, after the fact, that a

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modification of the prior art would provide an improvement or advantage, without suggestion thereof by the prior art, rather than dictating a conclusion of obviousness, is an indication of improper application of hindsight considerations. Simplicity and hindsight are not proper criteria for resolving obviousness. *In re Warner*, 397 F.2d 1011, 154 USPQ 173 (CCPA 1967).

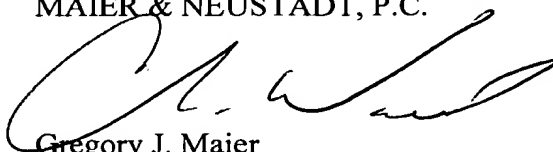
Accordingly, the Applicant respectfully requests the withdrawal of the obviousness rejection of independent Claim 19.

Claims 20-26 are considered allowable for the reasons advanced for Claim 19 from which they depend. These claims are further considered allowable as they recite other features of the invention that are neither disclosed nor suggested by the applied references when those features are considered within the context of Claim 19.

Consequently, in view of the above discussion, it is respectfully submitted that the present application is in condition for formal allowance and an early and favorable reconsideration of this application is therefore requested.

Respectfully Submitted,

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